

REMARKS

Claims 1 and 21 have been amended.

Applicant is submitting with this Amendment a Request for Continued Examination (RCE) with a payment in the amount of \$810.00 for the RCE fee by Electronic Funds Transfer (EFT). If any additional fees are required for entry of this Amendment, authorization is granted to charge our deposit account number 03-3415.

In the Office Action, claims 1-3 and 8 have been rejected under 35 USC 103(a) as being unpatentable over the Kobayashi (U.S. Patent Application Publication No. 2002/0044758) publication in view of the Lane, et al. ("Lane") (U.S. Patent No. 5,377,051) patent and in view of the Honjo (U.S. Patent No. 7,013,077) patent. Claims 21-24 have been rejected under 35 USC 103(a) as being unpatentable over the Kobayashi publication in view of the Lane patent. Applicant has amended independent claims 1 and 21 and with respect these claims, as amended, and their respective dependent claims, the Examiner's rejections are respectfully traversed.

Applicant's independent claim 1 has been amended to recite a reproducing apparatus comprising: a reproducing unit configured to reproduce first moving image data encoded by intra-frame encoding and inter-frame encoding and second moving image data which is different from the first moving image data and is encoded by the intra-frame encoding from a recording medium, the reproducing unit reproducing the first and second moving image data from the recording medium in response to a reproduction start instruction; an interface configured to output in a form of encoded data the first moving image data to an outside of said reproducing apparatus; a decoding unit configured to decode the first moving image data reproduced by the reproducing unit; a control unit configured to control operation of the

interface and operation of the decoding unit, wherein the control unit controls, in response to the reproduction start instruction, the decoding unit and the interface such that the decoding unit decodes the first moving image data reproduced by the reproducing unit and the interface outputs the first moving image data reproduced by the reproducing unit, in the form of encoded data and also the second moving image data reproduced by the reproducing unit, in the form of encoded data. Support for the amendments to claim 1 is set forth in the application as originally filed, and in particular, in FIGS. 1 and 2A and page 10, line 23 – page 12, line 24. No new matter have been introduced.

Independent claim 21 has been amended to recite an image processing apparatus comprising: an input unit configured to input moving image data; a signal processing unit configured to encode the moving image data input by the input unit and output encoded moving image data, the signal processing unit outputting first moving image data encoded by intra-frame encoding and inter-frame encoding and second moving image data which is different from the first moving image data and is encoded by the intra-frame encoding; an interface configured to output in a form of encoded data the first moving image data output from the signal processing unit to an outside of said reproducing apparatus; a recording unit configured to record the first and second moving image data output from the signal processing unit on a recording medium; a control unit configured to control operation of the interface and operation of the recording unit, wherein the control unit controls the interface and the recording unit such that the interface outputs in the form of encoded data the first moving image data output from the signal processing unit and also the second moving image data output from the signal processing unit in the form of encoded data while the recording unit records the first and second moving image data output from the signal processing unit in the

recording medium. Support for the amendments to claim 21 is set forth in the application as originally filed, and in particular, in FIGS. 1 and 2A and page 5, line 18 – page 10, line 20.

No new matter has been introduced.

In accordance with applicant's claimed invention, a reproducing apparatus includes a reproducing unit which in response to a reproduction start instruction reproduces, from a recording medium, first moving image data encoded by intra-frame encoding and inter-frame encoding and second moving image data, which is different from the first moving image data and is encoded by the intra-frame encoding, and a control unit which, in response to the reproduction start instruction, controls a decoding unit of the reproducing apparatus to decode the first moving image data of the first and second moving image data reproduced by the reproducing unit and an interface to output the first moving image data reproduced by the reproducing unit in the form of encoded data and also output the second moving image data reproduced by the reproducing unit in the form of encoded data. In this manner, the reproducing apparatus advantageously reproduces and outputs to an external device, such as another video tape recorder performing a dubbing operation, both the first moving image data (which includes both intra-frame and inter-frame encoded data) and the second moving image data (which includes only intra-frame encoded data) so that the device performing the dubbing operation (i.e., creating a copy) does not need to newly generate the intra frame encoded data based on the intra-frame and inter-frame encoded data. (See e.g., page 17, lines 6-14 of applicant's specification as filed). The cited art of record fails to disclose such features.

More specifically, the cited Kobayashi, Lane, and Honjo references, whether taken alone or in combination, do not teach or suggest at least a control unit that, in response to the

reproduction start instruction, controls operation of an interface and decoding unit such that the decoding unit decodes the first moving image data reproduced by the reproducing unit and the interface outputs the first moving image data reproduced by the reproducing unit, in the form of encoded data, and the second moving image data reproduced by the reproducing unit, in the form of encoded data, wherein the first moving image data is encoded by intra-frame encoding and inter-frame encoding and is different from the second moving image data that is encoded by the intra-frame encoding, as recited in applicant's independent claim 1. That is, the cited references do not teach or suggest reproducing and outputting both the first and second moving image data at the same time, wherein the first and second moving image data differ and the first moving image data is encoded by intra-frame encoding and inter-frame encoding while the second moving image data is encoded by only the intra-frame encoding.

As discussed in applicant's previous response, Kobayashi discloses an apparatus, which encodes a moving image using the MPEG standard and records the encoded moving image on a recording medium, and a reproducing apparatus, which reproduces the recorded data and outputs the MPEG reproduced data to an external device, such as a video tape recorder. However, as the Examiner acknowledged in the Final Office Action, Kobayashi fails to disclose the second moving image data that is different from the first moving image data and is encoded by the intra-frame encoding. (See Final Office Action, page 3). Thus, Kobayashi cannot, and does not, teach or suggest reproducing or outputting of the first and second moving image data at the same time, wherein the second moving image data is different from the first moving image data and is encoded by the intra-frame encoding, let alone reproducing and outputting different first and second moving image data in response to the reproduction start instruction, as required by applicant's claim 1.

As further acknowledged by the Examiner, Kobayashi fails to disclose a control unit that, in response to the reproduction start instruction, controls decoding unit such that the decoding unit selects the first moving image data among the first and second moving image data reproduced by the reproducing apparatus and controls the interface such that the interface outputs both the first and second moving image data reproduced by the reproducing apparatus. (See Final Office Action, page 3). Thus, Kobayashi cannot and does not teach or suggest the control unit that, in response to the reproduction start instruction, controls operation of an interface and decoding unit such that the decoding unit decodes the first moving image data reproduced by the reproducing unit and the interface outputs the first moving image data reproduced by the reproducing unit, in the form of encoded data, and the second moving image data reproduced by the reproducing unit, in the form of encoded data, as recited in applicant's amended independent claim 1.

In the Final Office Action, the Examiner, however, has argued that Lane discloses a reproducing apparatus that can selectively reproduce packetized video data for normal speed reproduction (interpreted by the Examiner as first moving image data) and high speed reproduction/trick play data (interpreted by the Examiner as second moving image data), wherein the normal speed data is encoded by the intra-frame encoding and inter-frame encoding and the high speed data is encoded by the intra-frame encoding. The Examiner has further argued that it would have been obvious to one skilled in the art to provide separate information for normal and high speed reproductions, as disclosed in Lane, in the apparatus of Kobayashi to improve quality of high speed reproduction by pre-recording the higher quality trick-play data in the trick-play segments. (See Final Office Action, pages 3-4).

Applicant reviewed the Lane reference and submits that Lane makes no mention of reproducing and outputting different first and second moving image data at the same time in response to the reproduction start instruction. In addition, the Examiner has not argued in the Action that Lane teaches such features. Rather, Lane expressly teaches that during the normal playback operation, only the recorded video data used for normal playback is being output and, likewise, during the “fast forward playback operation,” only the recorded video data used for the high-speed reproduction data is being output. (See e.g., col. 53, lines 36-62). That is, in Lane, only one of the two types of data, i.e., normal data or trick play data, is output, and never both types of data would be output at the same time. Thus, even if one of ordinary skill in the art would have used the teachings of normal and trick-play data of Lane to modify the system of Kobayashi, at most, in the resulting system, the normal play data would be selected and output in a normal dubbing mode, and the trick play data would be selected and output in a high speed dubbing mode. However, the resulting modified system would still lack the control, decoding, and interface units of applicant’s independent claim 1. That is, the combination of the Kobayashi and Lane references makes no mention of a decoding unit selectively decoding the first moving image data of the first and second image data reproduced by the reproducing unit and the interface outputting both the first and second moving image data reproduced by the reproducing unit in response to the reproduction start instruction. Furthermore, the combination of the Kobayashi and Lane references also fails to teach the control unit functioning together with the interface and the reproducing unit in the manner recited in the amended independent claim 1.

In the Final Office Action, the Examiner has argued that the Honjo patent discloses the control unit of applicant’s claims because Honjo teaches that, in response to a control signal

“Sch” (interpreted by the Examiner as the reproduction start instruction), the entire signal is outputted to the other medium to be recorded while the decoder outputs the selected signal to the display to notify the user of the dubbing progress. (See Final Office Action, page 4). The Examiner has further argued that it would have been obvious to one skilled in the art to include the control unit, as taught by Honjo, into the system of Kobayashi modified by the teaching of Lane to notify the user of the progress during dubbing of the moving image data. (See Office Action, page 5).

Assuming *arguendo* that the Examiner's interpretation of Honjo is correct, the suggested combination of the references still fails to teach the control unit of applicant's claim 1. More specifically, as recited in applicant's amended independent claim 1, the decoding unit decodes the first moving image data reproduced by the reproducing unit, while the interface outputs each of the first moving image data, reproduced by the reproducing unit, and the second moving image data, reproduced by the reproducing unit, in the form of encoded data. In contrast, as argued by the Examiner and disclosed in the portions of Honjo cited by the Examiner, the decoder (123a) in Honjo selects all or some frames for decoding depending on a particular selected mode. (See col. 10, lines 40-46 and col. 11, line 11 – col. 12, line 17). That is, whether all or selected frames are outputted by the decoder (123a), such frames are NOT encoded and Honjo makes no mention of outputting two different types of image data in the form of encoded data at the same time.

Rather, Honjo discloses a system for dubbing digital video data at speeds higher than normal playback speeds. (See Abstract; col. 1, lines 7-9; col. 3, line 32-50). Honjo also discloses that to allow for the dubbing state to be monitored, the MPEG video data is selectively decoded and output, by selecting only I or P frames for decoding. (See col. 3, lines

32-50; col. 10, lines 40-46; and col. 11, line 11 – col. 12, line 17). That is, in Honjo, depending on the selected decoding mode, either all or some frames are decoded and output. However, Honjo makes no mention of outputting two different types of data, for example, all frames and selected frames, in the encoded form, and thus, cannot and does not teach the control unit that, in response to the reproduction start instruction, controls operation of an interface such that the interface outputs the first moving image data reproduced by the reproducing unit, in the form of encoded data, and the second moving image data reproduced by the reproducing unit, in the form of encoded data, as recited in applicant's amended independent claim 1.

Accordingly, even if one skilled in the art would modify the system of Kobayashi with the above discussed teachings of Lane and Honjo, the resulting system would still lack the control unit of applicant's claim 1 that, in response to the reproduction start instruction, controls operation of an interface and decoding unit such that the decoding unit decodes the first moving image data reproduced by the reproducing unit and the interface outputs the first moving image data reproduced by the reproducing unit, in the form of encoded data, and the second moving image data reproduced by the reproducing unit, in the form of encoded data, wherein the first moving image data is encoded by intra-frame encoding and inter-frame encoding and is different from the second moving image data that is encoded by the intra-frame encoding. Therefore, applicant's amended independent claim 1, which recites such features, and its respective dependent claims, patentably distinguish over the cited Kobayashi, Lane, and Honjo references, whether taken alone or in combination with one another.

Applicant's independent claim 21 recites an image processing apparatus that includes features similar to those recited in claim 1, but is further arranged so as to encode an input

moving image to output first moving image data encoded by intra-frame encoding and inter-frame encoding and second moving image data which is different from the first moving image data and is encoded by the intra-frame encoding, wherein an interface of the image processing apparatus outputs, in the form of encoded data, the first moving image data output from a signal processing unit of the image processing apparatus and also outputs, in the form of encoded data, the second moving image data output from the signal processing unit, while a recording unit of the image processing apparatus records the first and second moving image data output from the signal processing unit on a recording medium. That is, applicant's claim 21 entails outputting both the first moving image data encoded by the intra-encoding and the inter-encoding and the second moving image data encoded by the intra-encoding, both of which are reproduced from the recording medium. Since, as argued above, the cited Kobayashi, Lane and Honjo references fail to teach or suggest generating and recording both the first and second moving image data on the recording medium and at the same time outputting the first and second moving image data in the form of encoded data to the external apparatus, these cited references, whether taken alone or in combination, do not teach the control unit of applicant's claim 21.

Accordingly, applicant's claim 21, which recites a control unit that controls operation of the interface and operation of the recording unit such that the interface outputs in the form of encoded data the first moving image data output from the signal processing unit and also the second moving image data output from the signal processing unit in the form of encoded data while the recording unit records the first and second moving image data output from the signal processing unit in the recording medium, and its respective dependent claims, patentably distinguish over the cited Kobayashi, Lane and Honjo references.

In view of the above, it is submitted that applicant's claims, as amended, patentably distinguish over the cited art of record, and thus, reconsideration and allowance of the application and claims is respectfully requested. If the Examiner believes that an interview would expedite consideration of this Amendment or of the application to issue, a request is made that the Examiner telephone applicants' undersigned attorney at (212) 790-9286.

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Respectfully submitted,



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